***Chapter 6 Factoring Polynomials***

**Factor** – to factor a polynomial means to write the polynomial as a product of two or more polynomials

***6.1 Greatest Common Factor and Factoring by Grouping***

To find the GCF of two or more monomials

1. Find the GCF of the coefficients
2. Find the smallest power of the common variables
3. The GCF is the product of these two factors

Example 1: Find the GCF of 28x3 and 42x5

To factor out the GCF in a Polynomial

1. Find the GCF of the terms in the polynomial
2. “Factor out” the GCF from each term

Use the distributive property to check your answer.

Factoring by Grouping

* Use when there are 4 terms in the polynomial
* Sometimes you might have to rearrange the terms before starting

1. Find the GCF of the first two terms & factor it out
2. Find the GCF of the second two terms & factor it out
3. If the remaining factors in each grouping are the same, factor it out.

Check by using FOIL.